Technical Safety Data Sheet

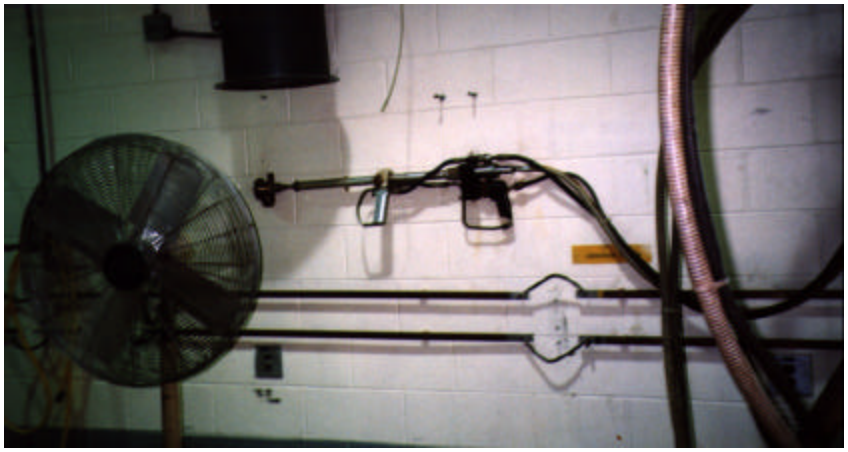
Equipment Name: Manual High Pressure Blast Equipment

Manufacturer: Jet Edge

Address
825 Rhode Island Avenue South
Minneapolis, MN 55426

Telephone Number: (612) 545-1477 **Fax Number:** (612) 593-1099

Date Prepared: November 18, 1997



Equipment Description: This equipment is a hand held spray gun (Gyra Jet) used to remove paint and rust from non-cylindrical metal objects, using a high pressure (35000 psi) water stream. The high pressure water is generated by an intensifier pump. After the blasting is completed, the water is collected and circulated through a filtration system using a sump pump. The intensifier/filtration system may also be used to supply water to an automated blast cabinet (the automated blast cabinet is not addressed in this Technical Safety Data Sheet).

Precautions for Safe Handling and Use:

THIS EQUIPMENT MUST NEVER BE USED ON LIVE ORDNANCE.

To ensure prompt emergency shutoff, a second operator must be stationed next to the intensifier pump. This equipment does not have any automatic emergency shutoff or means to secure the intensifier pump from the spray gun. High pressure water from a rupture in the spray gun supply hose could cause operator injury or equipment damage before the intensifier pump can be secured.

Use caution while working around charged high pressure hoses. If the high pressure water hose is not wall or ceiling mounted, loose hose on the deck creates an increased risk of being crimped or damaged and is a trip hazard.

Operate equipment in accordance with manufacturer's instructions:

Operation and Maintenance Manual for Pneumatic Robotic Swivel
Operation and Maintenance Manual for Pneumatic Gyra Jet
Operation and Maintenance Manual for Intensifier Pump
Operation Manual for Filtration System

Perform an equipment safety inspection prior to each blasting operation to ensure all connections are tight and hoses are not deteriorated or damaged.

Ensure the Gyra Jet is aimed in a safe direction (away from personnel or equipment) before starting operation. Pressurized water can cause severe personal injury or equipment damage.

Before disconnecting any hydraulic line on the intensifier, verify all pressure is relieved from the system.

Place a drain pan underneath the intensifier to collect any lubricant which may leak during the operation of this equipment.

Never operate the swivel assembly and the Gyra Jet without water flow. The water serves as a coolant to prevent heat damage to the seals and bearings.

Shut off intensifier and bleed off all water and air pressure at wand head before disconnecting any line.

Fluid leaks or overheating of the intensifier components must not be checked by placing a hand directly on the components. Use a piece of card board to check for leaks. Heat can be detected near a component without physically touching it.

Do not use flammable solvents to clean equipment parts.

Ensure manifold at the spray nozzle is securely installed to the water tubing before operating. Any water seepage past the connection, however slight, will quickly erode the metal and destroy parts.

Blasting should be conducted on a non-skid surface to prevent slipping.

Rinse and clean the blasting area after each blasting operation. Collect and filter all contaminated water using the sump pump/filtration system.

Do not permit blasting residue to dry. Particulate matter from the blasting operation may contain toxic contaminants. This blasting residue could become a respiratory hazard if it dries and becomes airborne.

After each blasting operation use a HEPA vacuum to collect dried, potentially toxic dust resulting from blasting operations. Sweeping could cause the dust to become airborne, creating a respiratory hazard.

Perform blasting in an enclosed area to minimize spreading of the blasting residue, which could contain potentially toxic contaminants.

Do not operate the blasting equipment outdoors unless blasting area is enclosed and all contaminated water is collected for filtration.

Wear personal protective equipment during the operation. See Control Measures section for description.

Ensure that explosion-proof lighting has been installed in the blasting area if equipment is operated inside.

Health Hazard Data:

Chemical Hazard: Particulate matter from the blasting operation may contain toxic contaminants. This blasting residue could become a respiratory hazard if it dries and becomes airborne.

Physical Hazard: Noise. Manufacturer stated that the equipment generates noise levels between 80 and 100db during operation.

Biological Hazard: None observed

Ergonomic Hazard: The spray gun weighs 15.5 lbs and the water pressure is 35,000 psi. Operator must hold the gun trigger and exert considerable force to keep the gun in position continuously during the blasting operation.

Environmental Hazard: The intensifier had lubricant leaking from underneath it during the inspection. This represents either failure of the seals or loose piping connections.

Particulate matter generated during blasting may be an environmental hazard.

Control Measures

Hearing Protection: Required.

Eye Protection: Wear safety glasses to protect eyes from flying debris.

Protective Gloves: Wear butyl rubber gloves to aid in gripping the gun.

Protective Clothing: Wear hooded water resistant coveralls.

Posting Requirements: The operating area must be posted "No Unauthorized Personnel Allowed" and "Hearing Protection Required" during all blasting operations.